Installation Guide

BusLogic

SW-121
OS/2 2.0
SCSI Adapter Driver

Installation Guide

BusLogic

SW-140
SCO UNIX BOOT-TIME
LOADABLE DRIVER

Revision History

Revision	Change Activity	Date
A	Release	7/13/92

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SECTION 1 — INTRODUCTION

BusLogic offers a wide range of high-performance host adapters that provide the interconnection between the host's system bus and Small Computer System Interface (SCSI) peripheral devices. The BusLogic SW-121 OS/2 2.0 SCSI Adapter Driver allows OS/2 applications to communicate with the SCSI host adapter and to access additional SCSI devices connected to the host adapter.
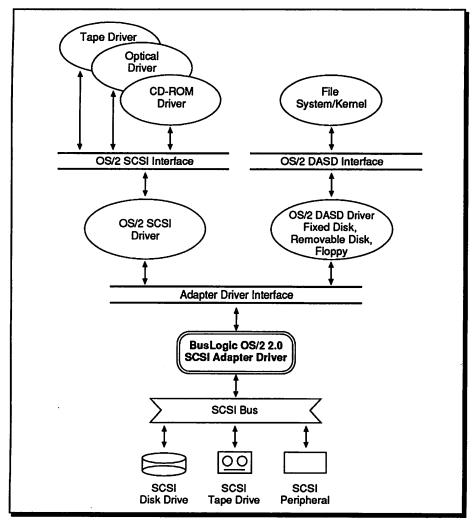

Figure 1-1. Role of the BusLogic OS/2 2.0 SCSI Adapter Driver

The OS/2 2.0 SCSI Adapter Driver is designed with an industry standard design approach. This design method simplifies the integration of SCSI peripherals into an OS/2 host system. A wide variety of SCSI peripherals, as well as SCSI hard disk drives, are supported.

The OS/2 2.0 SCSI Adapter Driver is compatible with:

❑ IBM's Standard and ESLS (Extended Services) Editions of OS/2 Version 2.0.

KEY FEATURES

The key features of the OS/2 2.0 SCSI Adapter Driver include:

❑ Support of OS/2 LAN Manager 2.0 or later.

The OS/2 2.0 SCSI Adapter Driver is designed to provide full support of BusLogic's complete family of Industry Standard Architecture (ISA), Extended Industry Standard Architecture (EISA), and Micro Channel SCSI host adapters. For more details on any of these BusLogic host adapters, refer to the host adapter's installation guide and reference manual.

REFERENCE DOCUMENTS

To install the OS/2 2.0 SCSI Adapter Driver on a computer, you should have the following documentation.

❑ BusLogic documentation for the SCSI host adapter board
❑ IBM's OS/2 installation and user's guide
❑ The system's installation and set-up guide
❑ The system's computer technical reference manual (optional)
❑ The documentation for the system's peripherals (if required)

HARDWARE AND SOFTWARE REQUIREMENTS

The BusLogic OS/2 2.0 SCSI Adapter Driver can be installed on any computer that has one or more ISA, EISA, or Micro Channel BusLogic host adapter boards.

To install the OS/2 2.0 SCSI Adapter Driver successfully, you should have the following software.

❏ BusLogic's OS/2 2.0 SCSI Adapter Driver installation diskette
❏ IBM's OS/2 Version 2.0 and
❏ Third-party software (e.g., tape back-up program) (if required)

SECTION 2 — INSTALLING THE OS/2 2.0 SCSI ADAPTER DRIVER

INSTALLATION TOOLS

The following items are needed to install the OS/2 2.0 SCSI Adapter Driver:

❑ BusLogic's OS/2 2.0 SCSI Adapter Driver diskette
❑ IBM'S OS/2 Version 2.0 system diskettes
❑ BusLogic's host adapter(s) installation manuals
❑ IBM'S OS/2 manuals
❑ Disk drive(s) manuals
❑ Disk subsystem(s) manuals.

The OS220 directory on the BusLogic installation diskette contains the OS/2 2.0 SCSI Adapter Driver files named BTSCSI.ADD and BTSCSI.DDP. For your convenience, a README.TXT file has been provided within the root directory. For the latest information on the OS/2 2.0 SCSI Adapter Driver, please refer to this README.TXT file on the BusLogic installation diskette.

INSTALLATION INSTRUCTIONS

To install BusLogic's OS/2 2.0 SCSI Adapter Driver, you should:

❑ Prepare for the installation by making backups and checking that the BusLogic host adapter board is already installed.

❑ Complete the standard OS/2 installation as described in the IBM OS/2 documentation.

❑ Use the automatic or manual method of installing the OS/2 2.0 SCSI Adapter Driver.

❑ Reboot the system.

There are two different methods available for installing the OS/2 2.0 SCSI Adapter Driver—(1) the automatic method, and (2) the manual method. Refer to the following heading for instructions on using the automatic method. For instructions on using the manual method, refer to the heading, "Using the Manual Method," later in this section.

NOTE

The standard IBMINT13.I13 driver in the CONFIG.SYS file can be used as a generic boot driver. For enhanced performance, however, install the BusLogic OS/2 2.0 SCSI Adapter Driver.

USING THE AUTOMATIC METHOD

To use the automatic method of installing the OS/2 2.0 SCSI Adapter Driver, complete the following three phases.

Phase 1 — Preparing for Installation

Before proceeding with the software installation, check that the BusLogic host adapter board is already installed. Up to four BusLogic Micro Channel host adapters, four EISA host adapters, or three PC/AT (ISA) host adapters per system are supported. Refer to the BusLogic host adapter installation guide, for information on installing the board.

NOTE

If the disk drive is greater than 1 GByte, you must enable the >1GB feature. Refer to the BusLogic host adapter installation guide for more information on enabling this feature.

Phase 2 — Completing the Standard IBM OS/2 Installation

Proceed to install the IBM OS/2 2.0 operating system on the computer. For more information on this phase, refer to the IBM OS/2 2.0 documentation.

Phase 3 — Completing the Automatic Installation Method

To complete the installation of the OS/2 2.0 SCSI Adapter Driver using the automatic method:

1. Insert the BusLogic installation diskette into Drive A.

2a. Either double-click on the **System Setup** icon in the OS/2 Desktop, and then select the **Device Driver Install** icon from the System Setup icon view screen

     or

2b. At the system prompt, type:

    DDINSTAL <RETURN>

3. Click on the **Change** button of the Source directory.

4. Select the OS220 directory, and then click on the **Set** button.

5. Click on the **Install** button.

6. Select the BusLogic driver and then click on **OK**.

    The installation and modification to the CONFIG.SYS file will be performed automatically.

7. Reboot the system.

This concludes the installation of the OS/2 2.0 SCSI Adapter Driver using the automatic method.

USING THE MANUAL METHOD

To use the manual method of installing the OS/2 2.0 SCSI Adapter Driver, you must prepare for the installation and then complete the standard IBM OS/2 installation. The preparation phase and the installation of the IBM OS/2 operating system are the same as described for the automatic method. For instructions on completing these first two phases of the manual method, refer to "Phase 1—Preparing for Installation," and "Phase 2—Completing the Standard IBM OS/2 Installation," under the previous heading, "Using the Automatic Method".

After the OS/2 operating system has been successfully installed, you must complete the following three steps to complete the manual installation.

❑ Copy the necessary BusLogic file over to the hard disk.

❑ Manually modify the system's CONFIG.SYS file.

❑ Reboot the system.

Step 1—Copying the Necessary BusLogic File over to the Hard Disk

1. After the message appears that the OS/2 installation has been completed successfully, reboot the system.

2. Double-click on the **Command Prompts** icon in the OS/2 Desktop to select OS/2 full screen.

3. Insert the BusLogic OS/2 2.0 SCSI Adapter Driver installation diskette into Drive A.

4. Copy the BusLogic OS/2 2.0 SCSI Adapter Driver (filename BTSCSI.-ADD) over to the hard disk by typing:

   COPY A:\OS220\BTSCSI.ADD C:\OS2\BTSCSI.ADD <RETURN>

Step 2 —Manually Modifying the System's CONFIG.SYS File

After copying the BusLogic OS/2 2.0 SCSI Adapter Driver (filename BT-SCSI.ADD) over to the system's hard disk, you must use the OS/2 editor to modify the CONFIG.SYS file. The CONFIG.SYS file must contain a specific reference to the BusLogic driver so that it will be loaded whenever the system is booted.

1. Invoke the IBM OS/2 system editor by typing:

   E Config.sys <RETURN>

2. The system's CONFIG.SYS file is displayed. Refer to the following for a sample portion of a CONFIG.SYS file.

   ```
   BASEDEV=PRINT01.SYS
   BASEDEV=IBM1FLPY.ADD
   BASEDEV=IBMINT13.I13
   BASEDEV=OS2DASD.DMD
   ```

3. For enhanced performance, insert the BusLogic OS/2 2.0 SCSI Adapter Driver (BTSCSI.ADD) into the CONFIG.SYS file.

   ```
   BASEDEV=PRINT01.SYS
   BASEDEV=IBM1FLPY.ADD
   BASEDEV=IBMINT13.I13
   BASEDEV=BTSCSI.ADD
   BASEDEV=OS2DASD.DMD
   ```

   For more information on using the IBM OS/2 system editor, refer to the IBM OS/2 documentation.

Step 3 — Rebooting the System

1. Reboot the system.

This concludes the installation of the OS/2 2.0 SCSI Adapter Driver using the manual method.

WARRANTY INFORMATION

If damage to the BusLogic OS/2 2.0 SCSI Adapter Driver installation diskette has occurred, return it in the protective envelope with this manual to your BusLogic supplier. The shipping agent should also be notified if the diskette has been damaged during shipment. The BusLogic warranty conditions are given in the back of this manual.

APPENDIX A — TROUBLESHOOTING

The following troubleshooting solutions are designed to assist you with problems encountered when you are trying to install and boot the OS/2 2.0 SCSI Adapter Driver in the IBM OS/2 environment.

Installation Problems

1. Symptom:

   ❑ During the installation, OS/2 attempts to write to the hard disk and reports that no hard disk(s) is present.

   Suggested Actions:

   ❑ Check the system configuration for an incorrect set up of an installed floppy disk drive.

   ❑ Check the system configuration for an incorrect set up of an installed floppy disk drive regarding its capacity. For example, this problem would occur if a 3.5″ 1.44 MByte floppy disk drive has been configured as a 1.2″ MByte floppy disk drive.

   ❑ Check the cabling and power to the SCSI drive.

   ❑ Check the SCSI ID on the SCSI drive. The hard drive should have been assigned a Target ID of zero.

Boot Problems

1. Symptom:

   ❑ While you were booting off of the SCSI hard disk drive, OS/2 reports that the file COUNTRY.SYS was not found.

   Suggested Actions:

   ❑ The standard IBMINT13.I13 driver in the CONFIG.SYS file can be used as a generic boot driver. For enhanced performance, however, BusLogic's OS/2 2.0 SCSI Adapter Driver should be installed.

      Check that the file BTSCSI.ADD (the OS/2 2.0 SCSI Adapter Driver) or IBMINT13.I13 is in the CONFIG.SYS file on the boot drive. If it is not, you may have to boot from a floppy diskette and then copy the BusLogic file BTSCSI.ADD over to the root directory of the SCSI hard disk drive (the boot drive).

2. Symptom:

   ❑ The system fails to boot from the boot partition on the SCSI hard disk drive.

   Suggested Actions:

   ❑ If the disk drive is greater than 1 GByte, you must have enabled the >1GB feature. Refer to the BusLogic host adapter installation guide for more information on enabling this feature. Otherwise, your boot partition must be within the first 1024 cylinders of your drive (i.e., up to 1 GByte).

APPENDIX B — TECHNICAL NOTES

1. The OS/2 2.0 SCSI Adapter Driver has been tested and found to work reliably with both the standard and ESLS (Extended Services) editions of IBM's OS/2 Version 2.0.

2. OS/2 requires 4 MBytes of RAM to boot; however, BusLogic recommends 6 MBytes of RAM, especially for systems with high I/O demands.

3. OS/2 uses disk I/O extensively during its task switch operations. Consequently, the faster the I/O system the more tasks you will be able to run with a given level of performance.

4. BusLogic's revision 'G' and above PC/AT (ISA) and EISA host adapters, and revision 'E' and above Micro Channel host adapters provide greater than 1 GByte support. To use this capability, you must have enabled the >1 GB feature. Refer to the BusLogic host adapter installation guide for more information on enabling this feature.

PRODUCT SUPPORT RECORD

The information on this page should be compiled and provided to your
supplier in writing to obtain technical support assistance. This will
enable your supplier to respond more rapidly and more appropriately to
your problem.

About BusLogic Product:
    BusLogic Product No: _____
    Serial Number _____
    Date of Purchase _____
    Firmware Version Number: _____
    BIOS Version Number: _____

Purchased From:
    Company: _____
    Address: _____
    _____

Purchased By:
    Name/Title: _____
    Company: _____
    Address: _____
    _____
    Telephone #: _____

About System Hardware Configuration:
    System Manufacturer: _____
    System Model and Speed: _____
    _____
    System BIOS Manufacturer: _____
    Memory in System: _____
    Hard Drives on System: _____

About System Software Configuration:
    Operating System/Version: _____
    Application Program/Version: _____

Detailed Description of Problem:

STANDARD WARRANTY

BusLogic warrants that subject to the terms of this policy the Products shall be free from defects due to faulty material or workmanship on the part of BusLogic for a period of one year from the date of delivery.

This warranty shall not apply if the Products have been subject to misuse by Customer or any other party; if any material alteration, addition, amendment, or modification shall have been carried out without the prior written consent of BusLogic; failure to install or operate the Products in accordance to BusLogic's Product reference manual; or failure caused by improper or inadequate maintenance of users.

BusLogic will make good by repair or at its option by replacement any Products which become defective within the warranty period. Repairs will be warranted for 90 days. Products or parts replaced under this provision shall become the property of BusLogic.

BEFORE RETURNING A PRODUCT FOR REPAIR, BUYER MUST REQUEST A RETURN MATERIAL AUTHORIZATION (RMA) NUMBER FROM BUSLOGIC.

All Products under warranty returned to BusLogic for repair shall be returned to Customer at BusLogic's expense. Shipping costs for all Products returned to BusLogic for repair which are out of the warranty period shall be at Customer's expense both to and from BusLogic.

Customer is expressly prohibited from issuing Debit Memos for material returned under the provisions of this warranty.

BusLogic shall notify Customer in the event that the Products returned for repair are not, in BusLogic's sole opinion, within this Warranty condition and, unless disposition instructions are given for such Products within thirty (30) days of such notification, the Products will be returned to Customer freight collect.

EXCEPT FOR THE ABOVE EXPRESS LIMITED WARRANTY, BUSLOGIC MAKES NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AND BUSLOGIC SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MER-CHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

The total liability of BusLogic for any claim or damage arising out of this Agreement, and whether in contract or in tort, shall not exceed the price of the individual Product(s) whose defect or damage is the basis of the claim.

IN NO EVENT SHALL BUSLOGIC BE LIABLE FOR ANY LOSS OF PROFITS OF FOR ANY OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES.

No action against BusLogic for breach of the warranty shall be commenced more than one (1) year after the accrual of the cause of action.

Customer also agrees to perform its duties and responsibilities under BusLogic's Warranty Policy, which shall be updated from time to time.

BusLogic

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